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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,136	05/24/2001	Indra Laksono	VIXS 005	8018
7590 08/10/2005 GARLICK, HARRISON & MARKISON, LLP P.O. BOX 160727 AUSTIN, TX 78716			EXAMINER SHANNON, MICHAEL R	
			ART UNIT 2614	PAPER NUMBER

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/865,136	Applicant(s) LAKSONO, INDRA	
	Examiner Michael R. Shannon	Art Unit 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☒ Claim(s) 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20010524</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-13, 15-25, 27-49, 51-61, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Humpleman (USP 6,005,861), cited by Examiner.

Regarding claim 1, the claimed “method for channel mixing in a multimedia system” is met as follows:

- The claimed step of “receiving a set of channel as encoded channel data” is met by the reception of the multiple forms of data including compressed video, compressed audio, compressed internet WWW graphics and data, and others at the NIU [col. 3, lines 25-35], such as MPEG-2, an encoded, compressed format of video [col. 7, lines 40-43].
- The claimed step of “interpreting the encoded channel data to identify a channel of interest of the set of channels based on a specific channel selection request” is met by the user service requests, which serve to aid the specific routing of received data (as discussed above) [col. 6, line 45-49]. The NIU 32 is responsible for performing external network specific interfacing, tuning demodulation, and error correction in order to provide

the received encoded channel data over home network 10 [col. 9, lines 49-53].

- The claimed step of “processing data of the channel of interest based on type of channel to produce generic data”, again, is met by NIU 32 being responsible for performing external network specific interfacing, tuning demodulation, and error correction in order to provide the received encoded channel data over generic home network 10 (Ethernet) [col. 9, lines 49-53].
- The claimed step of “converting the generic data into a stream of data” is met by the MPEG-2 video being transmitted over the home network 10 as a simple program transport stream according to user service request [col. 6, lines 45-49 & col. 7, lines 40-43].

Regarding claim 2, the claimed limitations are met by the multiple NIUs, which can provide software to support the external network (such as the packet based networks discussed above) and home network protocols for multiple streams and multiple users [col. 9, lines 60-62]. Each of the packets of data inherently contains a packet header for identifying which source the data originated from and which format the data is in for conversion to the home network data protocol, hence the reason for the software for converting between the external network protocol and the home network protocol. Furthermore, the MPEG transport stream is demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This

demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57].

Regarding claim 3, the claimed limitations are met by the MPEG transport stream being demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57] (see rejection to claim 2).

Regarding claim 4, the claimed limitations are, again, met by the multiple NIUs, which can provide software to support the external network (such as the packet based networks discussed above) and home network protocols for multiple streams and multiple users [col. 9, lines 60-62]. Each of the packets of data inherently contains a packet header for identifying which source the data originated from and which format the data is in for conversion to the home network data protocol, hence the reason for the software for converting between the external network protocol and the home network protocol. Furthermore, the MPEG transport stream is demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57].

Regarding claim 5, the claimed limitations are, again, met by the MPEG transport stream (multiple channels) being demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57] (see rejection to claim 2).

Regarding claim 6, the claimed limitations are met by the same reasons for rejection as discussed above regarding claims 1 and 2, also note that the data stream is sent through a filter 84 for providing a transmit path for data from the controller to the network [col. 9, lines 15-20].

Regarding claim 7, the claimed limitations are further met by the same discussion of the MPEG-2 transport stream being filtered and demultiplexed to produce the specific MPEG-2 transport channel of interest [col. 9, lines 55-57].

Regarding claim 8, the claimed limitations are met by the same discussion as mentioned above with regards to claim 1.

Regarding claim 9, the claimed limitations are met by the compressed video being converted into the home network protocol [col. 7, lines 26-35].

Regarding claim 10, the claimed limitations are met by the use of MPEG video data throughout the Ethernet home network, throughout the reference.

Regarding claim 11, the claimed limitations are met by the use of MPG audio data throughout the Ethernet home network [col. 10, lines 3-5].

Regarding claim 12, the limitations are met by the multiple NIUs, which can provide software to support the external network (such as the packet based networks discussed above) and home network protocols for multiple streams and multiple users [col. 9, lines 60-62]. Each of the packets of data inherently contains a packet header for identifying which source the data originated from and which format the data is in for conversion to the home network data protocol, hence the reason for the software for converting between the external network protocol and the home network protocol.

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Furthermore, the MPEG transport stream is demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57].

Regarding claim 13, the claimed limitations are further met by the same discussion of the MPEG-2 transport stream being filtered and demultiplexed to produce the specific MPEG-2 transport channel of interest [col. 9, lines 55-57].

Regarding claim 15, the limitations, are again met by the same discussion as laid out above with regards to claims 1 and 2.

Regarding claim 16, see the above rejection to claim 1.

Regarding claim 17, see the above rejection to claim 2.

Regarding claim 18, see the above rejection to claim 4.

Regarding claim 19, see the above rejection to claim 6.

Regarding claim 20, see the above rejection to claim 7.

Regarding claim 21, see the above rejection to claim 8.

Regarding claim 22, see the above rejection to claim 9.

Regarding claim 23, see the above rejection to claim 10.

Regarding claim 24, see the above rejection to claim 11.

Regarding claim 25, see the above rejection to claim 13.

Regarding claim 27, see the above rejection to claim 15.

Regarding claim 28, the claimed limitations are met by the multiple NIUs, which can provide software to support the external network (such as the packet based networks discussed above) and home network protocols for multiple streams and

multiple users [col. 9, lines 60-62]. Each of the packets of data inherently contains a packet header for identifying which source the data originated from and which format the data is in for conversion to the home network data protocol, hence the reason for the software for converting between the external network protocol and the home network protocol. Furthermore, the MPEG transport stream is demultiplexed down into a single stream at the NIU, in order to accommodate the user service request. This demultiplexing is done using the channel request information provided by the user [col. 9, lines 55-57]. In other words, the MPEG stream is parsed into a one-channel stream and is converted from the external network protocol to the home network protocol. The MPEG stream is chosen based on the user selection request.

Regarding claim 29, all of the functionality of claim 28 still applies, and the limitations of claim 29 are further met by the buffering of the received data in the NIU in order to provide a standard interface to the terminals on the home network 10 [col. 7, lines 11-13].

Regarding claim 30, the claimed limitations are met by the discussion of the MPEG-2 transport stream being filtered and demultiplexed to produce the specific MPEG-2 transport channel of interest based on the user service selection [col. 9, lines 55-57]. Also, the NIU 32 is responsible for performing external network specific interfacing, tuning demodulation, and error correction in order to provide the received encoded channel data over generic home network 10 (Ethernet) [col. 9, lines 49-53].



Regarding claim 31, the claimed interpreter is met by the transformer, which serves to transform the received data into the generic data for transmission over the home network [col. 9, lines 15-19].

Regarding claim 32, again, the claimed limitation is met by the transformer and filter 84, which serves to transform the received data into the generic data for transmission over the home network and map a transmit path for the data [col. 9, lines 15-19].

Regarding claim 33 and 34, the claimed limitation is met by the transformer 84, which acts to transform the received data into the generic data for transmission over the home network and map a transmit path for the data [col. 9, lines 15-19]. Also, note the MPEG decoder 70 of the set-top electronics 40, which functions to decode the received MPEG video at the STB.

Regarding claim 35, the claimed system bus is met by the bus 94, for providing the received data from the network 34 to the MPEG decoder 70 [col. 9, lines 11-14].

Regarding claim 36, the claimed limitation of the digital to analog converter is met by the digital to analog conversion for audio and video data at the set-top electronics 40 [col. 10, lines 5-7].

Regarding claims 37-49, see the above rejections to claims 1-13, respectively.

Regarding claims 51-61, see the above rejections to claims 15-25, respectively.

Regarding claim 63, see the above rejection to claim 27.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14, 26, 50, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman (USP 6,005,861), in view of Tamura et al (USP 5,801,776), both cited by Examiner.

Regarding claims 14, 26, 50, and 62, while the Humpleman reference seems to teach all of the limitations present in the aforementioned parent claims, the limitations of these claims are not explicitly met. The Tamura reference teaches a general concept for processing video images. The Tamura reference teaches a DCT transform element, a quantization element, and a Huffman coding scheme for generating compression video data ZZ [col. 11, lines 9-24]. The Examiner submits that since the Tamura reference is for compressing video data, that the elements of the compression scheme would have been obvious to one of ordinary skill in the art, in order to aid in the compression of the video and in order to have video data that was generically compressed and functional on the home Ethernet network of the Humpleman reference.

***Claim Objections***

5. Claim 34 is objected to because of the following informalities: Claim 34 is written as being dependent upon claim 3, however, this seems to be an apparent typographical

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error and is assumed to read "channel mixer of claim 30". Appropriate correction is required.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamlin (USP 5,574,964) discloses a system similar to that of Humpleman that uses NIUs to control the operation of an in-home network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon who can be reached at (571) 272-7356 or Michael.Shannon@uspto.gov. The examiner can normally be reached by phone Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

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Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon  
Examiner  
Art Unit 2614

Michael R Shannon  
August 1, 2005

  
**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**